

DECISION RECORD

COSO OPERATING COMPANY
HAY RANCH WATER EXTRACTION AND DELIVERY SYSTEM
CACA-046289
CA-650-2005-100

U.S. Department of the Interior
Bureau of Land Management
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555

July 23, 2009

SECTION 1

STATEMENT OF DECISION AND LEGAL FRAMEWORK

1.1 DECISION

This document provides the Decision Record for the decision of the U.S. Bureau of Land Management (“BLM”) to grant to Coso Operating Company a right of way (“ROW”) across public land to install a water pipeline for the Coso Operating Company’s Hay Ranch Water Extraction and Delivery System (“Project”). The purpose of the Project is to deliver ground water pumped in Rose Valley for injection into the geothermal reservoir that Coso Operating Company utilizes to generate electricity at nine existing power plants. Coso Operating Company anticipates that the injection of the water will reverse an ongoing decline in the steam produced from the geothermal reservoir and consequent reduction in the electric power generation. The nine power plants have historically generated as much as 270 MW of electricity in the aggregate, but in recent years that capacity has declined substantially as the liquid fraction in the geothermal resource has declined.

The Project site encompasses an approximately 9-mile-long corridor with a 50-foot right-of-way. The Project site encompasses a total of approximately 55 acres, which includes 5.63 acres of private land included within the Coso Hay Ranch, 32.24 acres on public lands managed by BLM, and 16.18 acres within the China Lake Naval Air Weapons Station (CLNAWS). Two existing wells, the North Well and the South Well, at the Coso Hay Ranch will be used to pump groundwater up to a maximum rate of 4,000 gallons per minute (gpm) and at an average rate of 3,000 gpm (4,800 acre-feet per year limited to a maximum of 3,000 acre-feet in the first year). Pumping will be limited to off-peak periods to minimize the electrical power costs of operations.

A 12-inch pipeline connection will be installed from the North Well past the South Well to a pump station located adjacent to the existing South Well, and will be located entirely on the Hay Ranch. At the pump station, a 250,000-gallon collection tank surrounded by a perimeter chain link fence will be constructed. From this collection tank, a 20-inch pipeline will be installed on public lands along an existing access road, generally rising in elevation to the Gill Station Road. The pipeline alignment will cross Gill Station Road and proceed east adjacent to the road along the southern and western edges, approximately 50 feet from the edge of the road, until just east of the CLNAWS boundary gate. The 20-inch pipeline will then cross Gill Station Road just south of the CLNAWS gate and proceed easterly onto CLNAWS for approximately 1 mile on the eastern edge of the road. The pipeline will then cross back over the road to a 1.5-million gallon holding tank located at the high point within CLNAWS. The pipeline will mostly

be buried, except for where volcanic outcrops would make excavation difficult; at those locations the pipeline will be constructed above the ground with pipe supports where needed. Water from the holding tank will be piped to the existing Coso Geothermal Project to the east with a 20-inch pipe proceeding underground approximately 50 feet from the road southeasterly to the injection system.

Power for the Project is proposed to be supplied by a new substation to be constructed by Southern California Edison (“SCE”) at a location immediately adjacent to the proposed location of the Project pumping equipment on privately owned land.

1.2 PLANS, LAWS AND REGULATIONS PERTINENT TO THE DECISION

California Desert Conservation Area Plan

The portion of the Project on public lands is subject to the California Desert Conservation Area Plan (“CDCA Plan”), approved in 1980 and last amended in 2006 by the West Mojave Plan, which applies to the West Mojave Desert. The desert encompasses 9.3 million acres in Kern, Los Angeles, Inyo and San Bernardino counties.

Under the BLM Multiple-Use Class M (Moderate Use) designation, “New distribution facilities may be allowed and shall be placed within existing rights-of-way where they are reasonably available.” The Project is covered by the Multiple-Use Class M designation under the 1980 CDCA Plan, as amended. Impacts associated with the Proposed Action on the 32 acres (5.32 miles) of BLM-managed lands would be confined to an area classified for Multiple-Use Class M.

In 1984, the CDCA Plan was amended to establish a 1-mile-wide, 5-mile-long corridor to connect the Coso Known Geothermal Resource Area (Coso KGRA) with Utility Corridor A, which runs north and south along the existing power lines on the east side and adjacent to U.S. Highway 395. A 115 kV transmission line and a buried telephone cable line right-of-way (CA-13510 and CA-18885) previously authorized to California Energy Company, and subsequently assigned to Coso Power Developers, Coso Finance Partners, and Coso Energy Developers, basically follow the same route as the Project pipeline.

The majority of the 20-inch pipeline will be located on public land that is within the amended corridor. The remaining portion, located in section 36, T. 21 S., R. 37 E., deviates north of the amended corridor but is within the 2-mile width of Corridor A. Therefore, the issuance of the ROW for the water pipeline is consistent with the CDCA Plan.

Local Land Use Planning Considerations

Private lands to be utilized in the Project encompass 5.63 acres located within the Coso Hay Ranch property controlled by the Coso Operating Company. This private land is designated as “unrestricted” in the 2001 Inyo County General Plan Update approved by the Inyo County Board of Supervisors on December 11, 2001 (Land Use Diagrams 1 and 22 of the general plan update). This general plan update includes provisions “to ensure the protection of the County’s water resources from over utilization, export, and degradation” as part of the Conservation/Open Space Element. Policy WR-3.2 addresses the management of groundwater withdrawals, described as follows:

Policy WR-3.2 Sustainable Groundwater Withdrawal

Inyo County shall manage groundwater resources within the county through ordinances, project approvals, and agreements to ensure an adequate, safe, and economically viable groundwater supply for existing and future development within the county, shall protect existing groundwater users, maintain and enhance the natural environment, protect the overall economy of the county, and shall protect groundwater and surface water quality and quantity (Conservation & OS Element - B. - Modified Policy 4).

The groundwater source for water associated with the Project is subject to regulation under the Inyo County Groundwater Ordinance. Coso Operating Company has received a conditional use permit pursuant to that ordinance, and as a condition of its issuance, Inyo County has required that Coso Operating Company implement a specific hydrologic monitoring and mitigation plan in accordance with the requirements of Inyo County Groundwater Ordinance Section 18.77.035.

The County's terms and conditions of the use permit issued to Coso Operating Company ensure that the Project is consistent with the Inyo County General Plan.

Federal Land Policy and Management Act

In 1976, Congress passed the Federal Land Policy and Management Act (“FLPMA”), Public Law 94-57, 43 U.S.C. §§ 1701–1785, to direct the management of the public lands of the United States. In Section 601 of FLPMA, Congress required the preparation of the CDCA Plan. It is the purpose of that plan to establish guidance for the management of the public lands of the California Desert by the BLM in clear accordance with the intent of Congress and the people of the U.S., as expressed in the law.

Section 601 of FLPMA requires that BLM develop a plan to “provide for the immediate and future protection and administration of the public lands in the California Desert

within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality.”

Remarkable resources exist within the Project area, including important mineral and energy resources. The CDCA Plan mapped areas that may have potential for energy resources, including geothermal. The Proposed Action is located within the Coso KGRA.

FLPMA also establishes the current federal legal framework for the issuance of rights of way on public lands. 43 U.S.C. §§ 1761–1771. BLM is acting pursuant to that statutory authority, and its administrative regulations published at 43 C.F.R. Part 2800, in issuing a grant of right of way to the Coso Operating Company.

The California Desert Protection Act

The California Desert Protection Act (CDPA), Public Law 103–433, protects 6.37 million acres managed by the BLM.

Sections of the CDPA that are pertinent to the Proposed Action include the following:

Section 803. Withdrawals

(a) **CHINA LAKE**

(1) Subject to valid existing rights and except as otherwise provided in this title, the federal lands referred to in paragraph (2), and all other areas within the boundary of such lands as depicted on the map specified in such paragraph which may become subject to the operation of the public land laws, are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing laws). Such lands are reserved for use by the Secretary of the Navy for:

- (A) Use as a research, development, test, and evaluation laboratory;
- (B) Use as a range for air warfare weapons and weapon systems;
- (C) Use as a high hazard training area for aerial gunnery, rocketry, electronic warfare and countermeasures, tactical maneuvering, and air support;
- (D) Geothermal leasing and development and related power production activities; and
- (E) Subject to the requirements of Section 804(f) of this title, other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) are the federal lands located within the boundaries of the China Lake Naval Air Weapons Station (CLNAWS); comprising approximately 1,100,000 acres in Inyo, Kern, and San Bernardino

counties, California, as generally depicted on a map entitled, China Lake Naval Air Weapons Station Withdrawal—Proposed, dated January 1985.

Section 805. Management of Withdrawn Lands

(g) MANAGEMENT OF CHINA LAKE

(1) The Secretary of the Interior may assign the management responsibility for the lands withdrawn under Section 802(a) of this title to the Secretary of the Navy who shall manage such lands, and issue leases, easements, rights-of-way, and other authorizations, in accordance with this title and cooperative management arrangements between the Secretary and the Secretary of the Navy *provided* that nothing in this subsection shall affect geothermal leases issued by the Secretary of the Interior prior to the date of enactment of this title, or the responsibility of the Secretary to administer and manage such leases, consistent with the provisions of this section. In the case that the Secretary assigns such management responsibility to the Secretary of the Navy before the development of the management plan under subsection (c), the Secretary of the Navy (after consultation with the Secretary) shall develop such management plan.

(2) The Secretary shall be responsible for the issuance of any lease, easement, right-of-way, and other authorization with respect to any activity, which involves both the lands withdrawn under Section 802(a) of this title and any other lands. Any such authorization shall be issued only with the consent of the Secretary of the Navy and, to the extent that such activity involves lands withdrawn under Section 802(a), shall be subject to such conditions as the Secretary of the Navy may prescribe.

(3) The Secretary of the Navy shall prepare and submit to the Secretary an annual report on the status of the natural and cultural resources and values of the lands withdrawn under Section 802(a). The Secretary shall transmit such report to the Committee on Energy and Natural Resources of the United States Senate and the Committee on Natural Resources of the United States House of Representatives.

(4) The Secretary of the Navy shall be responsible for the management of wild horses and burros located on the lands withdrawn under Section 802(a) of this title and may utilize helicopters and motorized vehicles for such purposes. Such management shall be in accordance with laws applicable to such management on public lands and with an appropriate memorandum of understanding between the Secretary and the Secretary of the Navy.

(5) Neither this title nor any other provision of law shall be construed to prohibit the Secretary from issuing and administering any lease for the development and utilization of geothermal steam and associated geothermal resources on the lands withdrawn under Section 802(a) of this title pursuant to the Geothermal Steam Act of 1970 (30 U.S.C. §1001 et seq.) and other applicable law, but no such lease shall be issued without the concurrence of the Secretary of the Navy.

(6) This title shall not affect the geothermal exploration and development authority of the Secretary of the Navy under Section 2689 of Title 10, United States Code, except that the Secretary of the Navy shall obtain the concurrence of the Secretary before taking action under that section with respect to the lands withdrawn under Section 802(a).

(7) Upon the expiration of the withdrawal or relinquishment of China Lake, Navy contracts for the development of geothermal resources at China Lake then in effect (as amended or renewed by the Navy after the date of enactment of this title) shall remain in effect *provided* that the Secretary, with the consent of the Secretary of the Navy, may offer to substitute a standard geothermal lease for any such contract.

BLM is the NEPA lead agency and the CLNAWS is a cooperating agency with respect to the Proposed Action. The 1980 amended MOU between the CLNAWS and the BLM will be in place to ensure that the CLNAWS' requirements on safety, security, and mission are recognized and constraints are understood. On the 2.67 miles (16.18 acres) of Navy-withdrawn lands affected by the Project, the CLNAWS retains surface management and the BLM retains subsurface management. On BLM-managed lands, the BLM maintains both subsurface and surface management.

Water Quality Protection

The federal Water Pollution Prevention and Control Act, 33 U.S.C. §§ 1251–1387, delegates to states the authority to regulate certain activities that may affect waters of the United States. California implements its delegated authority under the Clean Water Act through the State Water Resources Control Board and the Regional Water Quality Control Boards. The Lahontan Regional Water Quality Control Board administers the Project area pursuant to this delegated authority and its authority under the Porter-Cologne Water Quality Control Act, Cal. Water Code § 13000 *et seq.* The Lahontan Board confirmed by e-mail correspondence on February 13, 2009, which correspondence is included in Appendix A to this Decision Record, that Coso Operating Company is not required to obtain any permit from the Board in connection with the proposed project.

The U.S. Army Corps of Engineers is primarily responsible for administering the provisions of Section 404 of the Act (33 U.S.C. § 1344), which address the discharge of dredge or fill materials into waters of the United States. Coso Operating Company submitted a “Preliminary Jurisdictional Wetland Delineation” Report to the U.S. Army Corps with respect to the Project. By letter dated August 11, 2008, which is included in Appendix A to this Decision Record, the Corps concurred in the determination that the Project would not result in the discharge of dredge or fill materials into waters of the United States.

Air Quality Protection

The federal Clean Air Act (“CAA”), 42 U.S.C. §§ 7401–7671q, delegates to states the authority to regulate certain activities that may affect air quality. California implements its delegated authority under the CAA through 35 air districts, including 21 Air Pollution Control Districts and 14 Air Quality Management Districts. The Project area is located in Inyo County within the Great Basin Valleys Air Basin, managed by the Great Basin Unified Air Pollution Control District (“GBUAPCD”). Analysis presented in Section 4.1 and Appendix F of the Revised EA demonstrates that the Project is consistent with the existing authorizations issued by the GBUAPCD for the Coso geothermal projects and that no additional permit is required from GBUAPCD for the Project.

Protection of Wildlife

There are several categories of wildlife protection at both federal and state levels, depending on the magnitude of threat to continued existence and the existing knowledge of population levels. Special-status species include species that are listed as threatened or endangered either by the U.S. Fish and Wildlife Service (“USFWS”) or by the California Department of Fish and Game (“CDFG”). Special-status species are native species that have been accorded special legal or management protection because of concern for their continued existence.

BLM consulted with USFWS in accordance with the provisions of Section 7 of the Federal Endangered Species Act, 16 U.S.C. § 1536. The resulting Biological Opinion of the USFWS is included in Appendix A to this Decision Record.

In support of the approval by the California Energy Commission (“CEC”) of the Small Power Plant Exemption for the Coso Navy 2 Geothermal Project, in 1988 amended in 1998, BLM, CLNAWS, and CDFG entered into a Stipulation for Mitigation of Impacts to the Mohave ground squirrel (“MGS”) at the Coso KGRA, which includes an approved MGS Mitigation Plan (attached as Appendix C to the Decision Record). The Mitigation Plan required the establishment of a 43,448.5-acre Coso Grazing Exclosure Mitigation

Program, which includes MGS trapping within the enclosure and evaluations every 5 years for the life of the Navy 2 Project. CDFG recognizes that the 1988 Stipulation is “grandfathered in” under the provisions of CDFG Code Section 2081 and, therefore, that no additional incidental take authorizations or habitat compensation are required with respect to the potential impacts on the MGS resulting from the Project on the federal lands covered by the 1988 Stipulation and Mitigation Plan. Coso Operating Company will obtain a 2081 Incidental Take Permit with respect to the MGS and desert tortoise in relation to the Project activities to be conducted on private land.

Plant Protection

The Federal ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The Federal ESA defines “endangered” as any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A “threatened” species is a species that is likely to become endangered in the foreseeable future. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

The California Native Plant Society (“CNPS”) has developed an inventory of California’s special-status plant species (Skinner and Pavlik 1994). This inventory summarizes information on the distribution, rarity, and endangerment of California’s vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered special status by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of a plant’s sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

Sensitive habitats are natural communities that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

It is BLM’s policy to carry out management, consistent with the principals of multiple use, for the conservation of special-status plant species and their habitats and to ensure that actions authorized, funded, or carried out do not contribute to the need to federally list any of the species as threatened or endangered. The analysis set forth in Section 4.3 of the Revised EA demonstrates that the decision to issue a ROW for the Project is consistent with BLM’s policy.

Protection of Cultural Resources

Several laws require consideration of cultural resources and Native American concerns. The National Historic Preservation Act (“NHPA”) Public Law 69–665, as amended, 16 U.S.C. § 470 *et seq.*, requires that federal agencies consider the effects of all actions on certain cultural resources and that those adverse effects to protected cultural resources be mitigated. It also requires that federal agencies consult with the relevant State Historic Preservation Officer (“SHPO”) and consider the views of Native Americans who may be affected. The NHPA also includes provisions for consulting with Native Americans on the effects of a federal undertaking on archaeological sites or areas of traditional use or concern. The American Indian Religious Freedom Act states that it is the policy of the United States “to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, including but not limited to, access to sites.” The Religious Freedom Restoration Act requires that federal agencies ensure that their decisions do not substantially burden the free exercise of religion by Native Americans. FLPMA and NEPA also have provisions for providing tribal officials with the opportunity to comment on planning and on NEPA documents. In connection with its evaluation of the Project, BLM conducted nation-to-nation consultations with interested tribes and has entered into a Programmatic Agreement (included as Appendix D of the EA) with the SHPO and the Advisory Council on Historic Preservation.

SECTION 2 ALTERNATIVES AND MITIGATION

2.1 DESCRIPTION OF SELECTED ALTERNATIVE

The Project site encompasses an approximately 9-mile-long corridor with a 50-foot right-of-way. The Project site encompasses approximately 55 acres, which includes 5.63 acres of private land included within the Coso Hay Ranch, 32.24 acres on public lands managed by BLM, and 16.18 acres within the CLNAWS.

Private: Sections 25, 26, T. 21 S., R. 37 E., MDM, affecting 5.63 acres.

BLM: Sections 35 and 36, T. 21 S., R. 37 E., and Sections 31 through 34, and T. 21 S., R. 38 E., MDM, affecting 32.24 acres.

CLNAWS: Sections 1 through 3, T. 22 S., R. 38 E., MDM, affecting 16.18 acres.

Two existing wells, the North Well and the South Well, at the Coso Hay Ranch will be used to pump groundwater up to a maximum rate of 4,000 gallons per minute (gpm) and at an average rate of 3,000 gpm (4,800 acre-feet per year limited to a maximum of 3,000 acre-feet in the first year). Pumping will be limited to off-peak periods to minimize the electrical power costs of operations.

A 12-inch pipeline connection will be installed from the North Well past the South Well to a pump station located adjacent to the existing South Well, and will be located entirely on the Hay Ranch. At the pump station, a 250,000-gallon collection tank surrounded by a perimeter chain link fence will be constructed. From this collection tank, a 20-inch pipeline will be constructed on public lands along an existing access road, generally rising in elevation to Gill Station Road. The pipeline alignment will cross Gill Station Road and proceed east adjacent to the road along the southern and western edges, approximately 50 feet from the edge of the road, until just east of the CLNAWS boundary gate. The 20-inch pipeline will then cross Gill Station Road just south of the CLNAWS entrance gate onto withdrawn lands and proceed easterly for approximately 1 mile on the eastern edge of the road. The pipeline will then cross back over the road to a 1.5-million gallon holding tank located at a high point within CLNAWS. The pipeline will mostly be buried, except for where volcanic outcrops would make excavation difficult; at those locations the pipeline will be constructed above the ground with pipe supports where needed. Water from the holding tank will be piped to the existing Coso Geothermal Project to the east with a 20-inch pipe proceeding underground approximately 50 feet from the road southeasterly to the injection system. The pipeline route is shown in Figure 1.

The total power requirement for the downhole pumps, booster pump station, area lighting, and instrumentation is expected to be up to 2.5 megawatts (MWs). Power requirements will be at 4,160 volts (V) for the booster pump station, 480 V for the downhole pumps, and 120 V/240 V for area lighting and minor house loads. As a result, there will be at least four transformers required for the electrical installation, depending on the supply voltage from the local utility.

Power for the Project will be supplied by a new substation to be constructed by Southern California Edison (“SCE”) at a location immediately adjacent to the proposed location of the Project pumping equipment. The new substation will be tied into SCE’s main transmission line, which runs past the Hay Ranch, using overhead transmission cables run on pole structures. The substation capacity will be approximately 3 MW to serve the Project load and an existing SCE customer load of less than 1 MW that SCE currently serves from the Los Angeles Department of Water and Power (“LADWP”) Haley substation.

2.2 MITIGATION

Air Quality (Revised EA at pages 47-48)

The following mitigation measures shall be implemented during construction of the Project to reduce potentially significant impacts associated with fugitive dust (including visibility impacts) to less than significant levels:

- Water all active construction areas, including unpaved access roads (if applicable), at least twice daily or more often if winds exceed 15 miles per hour (mph) or fugitive dust is observed leaving the construction site boundary.
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (e.g., dirt and sand).
- Limit construction traffic speeds on unpaved roads to 15 mph. All contractors and Project applicant staff who will use unpaved roads during construction of the Project shall be informed of the 15 mph speed limit.

Soils Conservation (Revised EA at page 48)

- Application of erosion protection in accordance with the revegetation plan (see Appendix G of the Revised EA) will consist of applying straw over the standard revegetation seed mixture and/or redistributed topsoil, to prevent erosion.

- Construction vehicles will be confined to designated roads and parking areas to prevent compaction of outlying areas.

Vegetation (Revised EA at pages 49-50)

- Coso Operating Company shall crop or crush, not blade, vegetation underneath and along the pipeline corridor, except in any areas required for above ground supports, which shall be cleared.
- The pipeline corridor shall be revegetated according to the revegetation plan provided in Appendix G of the Revised EA.
- Coso Operating Company shall gain and maintain access to the pipeline by pruning, not by destruction of existing vegetation through clearing or blading.
- Construction equipment and vehicles shall be cleaned to remove dirt and any vegetative material prior to accessing the site. This will reduce the potential for introduction of invasive or noxious species.
- Prior to construction, monitoring shall occur to determine the presence of noxious or invasive species on or adjacent to the pipeline corridor. Any removal program must be approved by the BLM in advance of its implementation.
- The pipeline corridor shall be monitored for 5 years after completion of construction. Any noxious or invasive species found will be reported to the BLM and control measures will be developed and implemented only after review and approval by the BLM.
- During construction, the pipeline corridor shall be monitored for special-status plant species. Any populations of special-status species shall be identified and avoided through rerouting of the pipeline within the surveyed corridor.

Water (Revised EA at page 52)

- Coso Operating Company has obtained a conditional use permit from Inyo County authorizing ground water extraction in connection with the Proposed Action and shall implement the Hydrologic Monitoring and Mitigation Plan (HMMP) (see Appendix H of the Revised EA) as approved by Inyo County. The Notice of Determination by Inyo County is included in Appendix A of this Decision Record.

Wildlife (Revised EA at pages 54-55)

- The pipeline corridor shall be revegetated according to the revegetation plan for the Project (Revised EA Appendix G).
- Preconstruction biological monitoring shall be conducted prior to construction to identify any possible wildlife within the pipeline alignment. Any potential tortoise, MGS burrows or ground nesting sites in the alignment shall be examined prior to construction to assure their avoidance.
- A tortoise-proof exclusion fence shall be installed around the Project construction area including staging areas and laydown sites; the fencing shall be maintained throughout construction and all work shall be conducted within the fenced areas.
- A qualified biological monitor shall be on site during all phases of construction. The biological monitor shall ensure that the tortoise fencing remains in place and that all work occurs in place within the fenced areas.
- All construction workers shall be briefed as to measures to avoid impacts to desert tortoise and other special-status species; these measures shall include proper disposal of solid waste, no driving in areas outside of the tortoise enclosures, and the exclusion of pets and firearms from the Project site.
- Coso Operating Company shall debit 48.42 acres from its remaining acreage credit allowance under the approved MGS Mitigation Plan.
- Coso Operating Company shall obtain an incidental take permit with respect to the MGS and desert tortoise to authorize incidental takes that may occur on private land in connection with the Project, and shall satisfy all habitat compensation requirements of the CDFG as a condition of that authorization.

Cultural Resources (Revised EA at page 55)

All sites found in the Project APE will be avoided during construction by shifting that portion of the APE for the proposed pipeline to within the paved or gravel roadway (Gill Station Road). This avoidance includes a 30-meter (98-foot) buffer zone around large sites (INY-1863, INY-2125, INY-4413, and CGP-2), and a 10-meter (33-foot) buffer zone around small ones (INY-3406 and CGP-1). A cultural monitor is required during any construction activities within any avoidance area, along with the temporary placement of orange environmental fencing to protect the sites.

Native American Concerns (Revised EA at pages 56-57 and Appendix D)

As a result of consultation among the five tribes of the Owens Valley region (Bishop, Big Pine, Fort Independence, Lone Pine, and Timbisha Shoshone of Death Valley), BLM has included the Coso Hot Springs within the APE for this Project. Further consultation among these tribes and BLM led to the completion of a Programmatic Agreement (PA) that will allow BLM to take into account the effects of the undertaking on both Coso Hot Springs and the archaeological sites within the proposed pipeline corridor. This PA was signed by BLM, SHPO, and the ACHP in Washington, D.C. during the summer of 2008 (Revised EA Appendix D).

The major provisions of the PA require that BLM will assume all archaeological sites within the APE as eligible for the National Register of Historic Places (NRHP).

- Coso Operating Company will ensure that the pipeline route and construction avoids the six archaeological sites located within the APE.
- An approved qualified archeologist and Native American monitor will be present during construction activities.
- CLNAWS has been monitoring the geophysical state of the Coso Hot Springs on a monthly basis since 1979 as a provision of an earlier PA related to the construction of the initial geothermal facility, and an annual report that tallies these monthly observations will be distributed to the signatory and concurring parties to the PA.
- CLNAWS has been coordinating the visitation and use of Coso Hot Springs by Native Americans and Traditional Practitioners since 1979 (Appendix A to this Decision Record) as a provision of an MOU between the Coso Ad Hoc Committee, composed of acknowledged individuals from the Owens Valley tribes and Kern County Indian Community, and an annual summary of Native American

use of the Coso Hot Springs will be provided to the signatories and concurring parties to the PA.

- If changes in use patterns by the Traditional Practitioners resulting from the implementation of the undertaking are identified, BLM and CLNAWS will initiate consultation among the signatory and concurring parties regarding the observed changes.
- In order to minimize impacts to Native Americans traveling to the Coso Hot Springs, vehicle traffic (within a reasonable distance of the religious activity) will be halted or kept to a minimum during ceremonial and religious observances related to the visitation. CLNAWS will notify the Project Proponent of Native American visits to the designated prayer sites and Coso Hot Springs so that activities such as construction can be scheduled to minimize or eliminate interference with these ceremonial activities.

2.3 ALTERNATIVES CONSIDERED

Alternatives were identified and considered by the BLM. In accordance with Title 40 CFR 1502.14 (a), reasonable alternative methods are limited by physical and land use/environmental factors. Physical factors include the geothermal well sites, the water pipeline and tanks, and access roads to the well field. Land use/environmental factors are those that limit such activities in undisturbed areas because of either specific land use designations and restrictions (e.g., multiple-use class designation, critical habitat/wilderness), or additional new negative significant environmental impacts that could occur when compared to using existing disturbed corridors/routes. Also considered was whether the alternative meets the purpose, need, and objectives of the Proposed Action; whether the alternative conflicts with a specific provision of the land use plan (CDCA Plan, including the Western Mojave Plan); whether the alternative directly conflicts with federal, state, and local laws and regulations; and whether the alternatives are technically and economically feasible.

No Action Alternative

The BLM would not issue a right-of-way for construction of a pipeline. Implementation of the No Action Alternative would result in no pipeline being constructed within land administered by the BLM or the CLNAWS. On a practical basis, the No Action Alternative would preclude the development and transport of supplemental water to the Coso Geothermal Project because there would be no alignment that would not pass through lands administered by the BLM and the CLNAWS. Implementation of the No Action Alternative would eliminate all of the impacts associated with construction of the

pipeline. Additionally, implementation of the No Action Alternative would eliminate any direct or indirect impacts associated with groundwater pumping.

The No Action Alternative is included even though it does not meet the Project need because it is required by NEPA for consideration.

Other Alternatives Considered

The Final Environmental Impact Report (EIR) for the Project (MHA 2008) identifies and analyzes a reasonable range of alternatives:

- Increasing power generation output through power plant design changes and enhancements;
- Alternative sources of injection waters, including groundwater wells on CLNAWS, groundwater wells in the Coso Basin, and marginal geothermal wells in the Coso Range;
- Reducing the duration of the proposed pumping;
- Pumping Hay Ranch wells at maximum rate sustainable for the 30-year project life without reaching trigger levels; and
- Pumping Hay Ranch wells at lower rates.

The BLM independently considered the analysis of these alternatives presented in the EIR and incorporated that analysis by reference into the Revised EA (Appendix E of the Revised EA). With respect to potential impacts to the groundwater and groundwater-dependent resources in Rose Valley, BLM obtained assistance from the United States Geological Survey in reviewing the hydrologic evaluation set forth in the Revised EA Appendix H. The Field Office also consulted with BLM's National Operation Center in connection with the hydrologic evaluation. BLM has concluded that the HMMP, including the hydrologic model developed to inform the HMMP, is sufficient to guide protection of the hydrologic resources of Rose Valley against any significant adverse impacts.

BLM has also concluded that none of these alternatives is preferable to the Project, considering the purpose and objectives of the Project and the comparative potential environmental effects of the Project and its alternatives. In arriving at this conclusion, BLM has taken into account potential cumulative impacts associated with the Project, and notes in particular in this regard that the Final Environmental Impact Report for Proposed Leasing within the Coso Known Geothermal Resource Area, issued by BLM in 1980, anticipated and evaluated a greater cumulative level of geothermal resource development than has occurred or may occur as a result of approval of the Project in

combination with the additional geothermal resource development most recently identified in BLM's Draft Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States (May 2008). Accordingly, BLM has appropriately tiered its analysis for the Project from its prior environmental review.

SECTION 3
FINDING OF NO SIGNIFICANT IMPACT

A Revised Environmental Assessment was prepared for the proposed action. On the basis of the Revised EA, BLM is issuing a Finding of No Significant Impact (FONSI) with respect to the Proposed Action. An Environmental Impact Statement is not required.

SECTION 4 PUBLIC INVOLVEMENT, COMMENTS RECEIVED AND RESPONSES TO COMMENTS

4.1 PUBLIC INVOLVEMENT AND REVISED EA REVIEW

The Revised EA was distributed on December 8, 2008 with the close of comments to be January 23, 2009. The following comments were received:

- Letter from Bill Gaines, President, California Outdoor, Heritage Alliance, Dated December 29, 2008.
- Letter from Terry Yarris, Director of Conservation Policy, California Waterfowl, Dated January 6, 2009.
- Letter from Gary D. Arnold, Arnold, Bleuel, Larochelle, Mathews & Zirbel LLP. Dated January 19, 2009
- Letter from Gary D. Arnold, Arnold, Bleuel, Larochelle, Mathews & Zirbel LLP. Dated January 20, 2009
- Letter from Chris Ellis, Site Manager Coso Operating Company LLC. Dated January 21, 2009.
- Letter from Joe Kennedy, Tribal Chairperson, Timbisha Shoshone Tribe Dated January 23, 2009.
- Letter from Michael Lumsden, Chief Operations Officer, Bishop Paiute Tribe. Dated January 23, 2009.
- Email from Brian Adkins, Environmental Director, Bishop Paiute Tribe Dated January 23, 2009.
- Letter from Virgil Moose, Tribal Chairperson, Big Pine Paiute Tribe of the Owens Valley. Dated January 23, 2009.
- Email from Barbara Durham, Timbisha Shoshone Tribe Dated January 24, 2009.

4.2 COMMENTS AND RESPONSES TO COMMENTS

The comment letters received by BLM on the Revised EA and FONSI and BLM's responses to those comments are set forth in Appendix C to this Decision Record. Many of the comments were similar or identical to comments submitted by the same commenters on the Draft EIR prepared by the County of Inyo. BLM considered the responses provided by the County to such comments, and has largely adopted those responses for the purpose of responding to the similar or identical comments on the Revised EA. Appendix B functions as an errata sheet and shows the minor corrections made to the Revised EA.

No new information was discovered or revisited in association with answering all comments. No major revisions to the Revised EA and draft FONSI have been made as a result of any comment. Recirculation of the Revised EA therefore is not required.

BLM further notes in this regard that the Final Environmental Impact Report for Proposed Leasing within the Coso Known Geothermal Resource Area, issued by BLM in 1980, anticipated and evaluated a greater cumulative level of geothermal resource development than has occurred or may occur as a result of approval of the Project in combination with the additional geothermal resource development most recently identified in BLM's Draft Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States (May 2008). Accordingly, BLM has appropriately tiered its analysis for the Project from its prior environmental review.

SECTION 5

RATIONALE FOR SELECTION OF ALTERNATIVE

The Project, with implementation of the specified mitigation measures, will not result in any significant impacts on geology, soils, hydrology, water quality, air quality, biological resources, land use, recreation or any other elements of the human environment. BLM's issuance of the requested right-of-way grant will provide a public benefit by allowing the Hay Ranch Project to increase electrical generation capacity derived from clean and renewable energy sources.

BLM, in its capacity as NEPA lead agency responsible for management of public lands, has determined that the request right-of-way grant can be issued in accordance with relevant federal laws, regulations and policies. In particular, the Proposed Action is consistent with the encouragement of the development of renewable energy resources under the President's National Energy Policy. Accordingly, BLM's Interim Geothermal Energy Development Policy (IM 2003-020) stipulates that rights-of-way should be managed to encourage the development of geothermal energy in acceptable areas while minimizing impact to natural, cultural and visual resources on public lands.

SECTION 6
PROTEST AND APPEAL OPPORTUNITIES

Any party who believes they would be adversely affected by the decision of an officer of the Bureau of Land Management has the right to appeal the decision to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4.

SECTION 7
CONTACT INFORMATION AND SIGNATURE

For additional information contact either Hector Villalobos, Field Manager (760-384-5400) or Linn Gum, Chief, Lands & Minerals (760-384-5450) at 300 S. Richmond Road, Ridgecrest, CA 93555.

 Date: 7/23/2009

Hector Villalobos
Field Manager
Ridgecrest Field Office

Appendix A

REGULATORY AGENCY LETTERS

1979 Programmatic MOA Between
(The Commander, Naval Weapons Center
California State Historic Preservation Officer
Advisory Council on Historic Preservation)

1979 MOA

The Commander, Naval Weapons Center
Coso Ad Hoc Committee

USFWS Biological Opinion

U.S. Army Corps of Engineers

Lahontan Water Quality Control Board

Appendix B

MINOR REVISIONS TO THE REVISED EA

4. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

Deep Rose Geothermal

Deep Rose, LLC has proposed exploration for geothermal resources in the southern Inyo County. If a resource is located, Deep Rose, LLC would apply for permits with the state for geothermal development. The area of exploration is located on state land in the southern McCloud Flat region within Section 16, Township 21, South Range 38 East, Mount Diablo Base Meridian. This is located 5.75 miles northeast of the Hay Ranch. Deep Rose, LLC has pending non-competitive geothermal lease applications on public land in the Rose Valley which will be evaluated.

4.7 Cultural Resources

4.7.1 Impacts

Existing archaeological sites registered ~~in~~ or considered eligible for the NRHP were found within the Project APE. However, impacts to these sites due to the Proposed Action can be minimized through adoption of mitigation measures outlined in Section 4.7.3 of this Revised EA. No residual impacts to cultural resources are anticipated after the implementation of the mitigation measures described here.

4.7.2 Cumulative Impacts

The other projects in the cumulative baseline may impact cultural resources. Each of these projects would be required to follow similar mitigation measures as described in Section 4.7.3 of this Revised EA.

4.8 Native American Values

4.8.1 Impacts

Impacts to Native American resources from the Proposed Action are addressed through the Programmatic Agreement (PA) (Appendix D of this Revised EA) signed by the BLM, SHPO, and ACHP. With mitigation, no significant impact regarding Native American values would result from implementation of the Project.

Appendix C

COMMENT LETTERS AND RESPONSES